

Claims

- [c1] 1. A color correcting circuit coupled to a video source and a display panel, comprising:
a video look-up circuit, coupled to the video source, wherein an N bit video data from the video source is modulated into a $N+M$ bit video data according to a color look-up table;
a $N+M$ bit data driving circuit, coupled to the video look-up circuit for receiving and outputting the $N+M$ bit video data; and
a $N+M$ bit data gamma voltage generating circuit, coupled to the $N+M$ bit data driving circuit for receiving the $N+M$ bit video data and providing the voltages in every step according to the values found in a gamma color correction table,
wherein, M is a natural number.
- [c2] 2. The color correction circuit of claim 1, wherein the $N+M$ bit data gamma voltage generating circuit comprises a gamma correction circuit.
- [c3] 3. The color correction circuit of claim 1, wherein the $N+M$ bit video data comprises $N+M$ bit video data for the color red.

- [c4] 4. The color correction circuit of claim 1, wherein the N+M bit video data comprises N+M bit video data for the color green.
- [c5] 5. The color correction circuit of claim 1, wherein the N+M bit video data comprises N+M bit video data for the color blue.
- [c6] 6. The color correction circuit of claim 1, wherein the display panel displays the corrected N+M bit video data.
- [c7] 7. A method of correcting the colors of a display, comprising the steps of:
providing an N bit video data;
modulating the N bit video data into aN+M bit video data according to a color look-up table; and providing the voltages of every step for the N+M bit video data according to the values found from a gamma color correction table,
wherein, M is a natural number.
- [c8] 8. The method of claim 7, wherein the N+M bit video data comprises N+M bit video data for the color red.
- [c9] 9. The method of claim 7, wherein the N+M bit video data comprises N+M bit video data for the color green.
- [c10] 10. The method of claim 7, wherein the N+M bit video

data comprises $N+M$ bit video data for the color blue.